

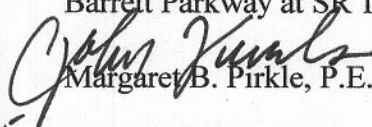
D.O.T. 66


**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

---

**INTERDEPARTMENT CORRESPONDENCE**

**FILE** P. I. No. 0004447, Cobb County **OFFICE** Preconstruction  
STP-0004-00(447)  
Barrett Parkway at SR 120 **DATE** June 24, 2005

**FROM**  Margaret B. Pirkle, P.E., Assistant Director of Preconstruction

**TO**  SEE DISTRIBUTION

**SUBJECT** APPROVED PROJECT CONCEPT REPORT

Attached for your files is the approval for subject project.

MBP/cj

Attachment

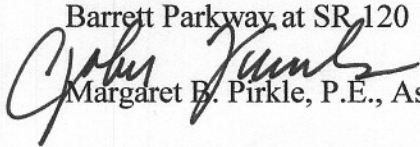
**DISTRIBUTION:**

Brian Summers  
Harvey Keepler  
Ken Thompson  
Jamie Simpson  
Michael Henry  
Keith Golden  
Joe Palladi (file copy)  
Paul Liles  
Babs Abubakari  
Bryant Poole  
BOARD MEMBER

# DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

## INTERDEPARTMENT CORRESPONDENCE

**FILE** P.I. No. 0004447, Cobb County **OFFICE** Preconstruction  
 STP-0004-00(447)  
 Barrett Parkway at SR 120 **DATE** June 21, 2005

**FROM**  Margaret B. Pirkle, P.E., Assistant Director of Preconstruction

**TO** David E. Studstill, Jr., P.E., Chief Engineer

**SUBJECT** PROJECT CONCEPT REPORT

This project proposes improvements to the SR 120/Dallas Highway at Barrett Parkway/CR 321 intersection located 1.5 miles west of the City of Marietta. The existing intersection is signalized and lies within a commercial zone. State Route 120/Dallas Highway consists of 96' of pavement; eight, 12' lanes and a 10' concrete median; 2.5' concrete curb and gutter and a 5' sidewalk. Barrett Parkway consists of 84' pavement; seven, 12' lanes, a 10' concrete median and 2.5' concrete curb and gutter with a 5' sidewalk. The intersection's area has experienced tremendous growth and development. Vehicles traveling westbound on SR 120/Dallas Highway and northbound on Barrett Parkway experience delays when making left turns. The high volume of vehicles making left turns at the intersection ques back into adjacent through lanes. These conditions have made the intersection's safety a point of concern as evidenced in the increase in rear end accidents of thirty (30) and six (6) sideswipes accidents in one year. Base year traffic is 46,192 VPD with a projected volume of 58,430 VPD by the design year 2025.

The construction proposes to widen Barrett Parkway with a 12' right turn lane in the southbound lane and adding second left turn lanes for the westbound lanes of Dallas highway and the northbound lanes of Barrett Parkway. This project will require striping modifications, milling of existing pavement markings and striping for additional left turn lanes.

Environmental concerns include requiring a Categorical Exclusion be prepared; a public meeting is not required; time saving procedures are appropriate.

The estimated costs for this project are:

	<u>PROPOSED</u>	<u>APPROVED</u>	<u>FUNDING</u>	<u>PROG DATE</u>
Construction (includes E&C and inflation)	\$134,000	\$90,000	Q23	2005
Right-of-Way & Utilities*	Local	Local		

David Studstill

Page 2

P. I. No. 0004447, Cobb

June 21, 2005

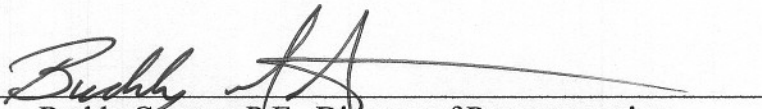
\*Cobb County signed PMA on 7-30-03 for PE, right-of-way, utilities and 20% of construction costs.

I recommend this project concept be approved.

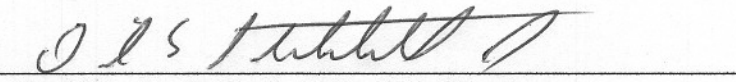
MBP:JDQ/cj

Attachment

CONCUR

  
Buddy Gratton, P.E., Director of Preconstruction

APPROVE

  
David E. Studstill, Jr., P.E., Chief Engineer

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

**INTERDEPARTMENTAL CORRESPONDENCE**

**FILE:** STP-0004-00(447) Cobb  
P.I. No. 0004447  
Barrett Parkway @ S.R. 120

**OFFICE:** Engineering Services

**DATE:** June 14, 2005

**FROM:** Brian K. Summers, P.E., Project Review Engineer *REW*

**TO:** Meg Pirkle, P.E., Assistant Director of Preconstruction

**SUBJECT: CONCEPT REPORT**

We have reviewed the Concept Report submitted June 8, 2005 by the letter from Bryant Poole, dated May 20, 2005, and have the following comment:

- This project currently has FY 05 funding. At this point it will be difficult to get the funds authorized for FY 05.

The costs for this project are:

Construction	\$121,543
Inflation	\$0.00
E & C	\$12,154
Reimbursable Utilities	\$0.00
Right of Way	\$0.00

REW

c: Bryant Poole, Attn.: Lowell James



Project Concept Report page 1  
Project Number: STP-0004-00(447)  
P.I. Number: 0004447  
County: Cobb County

## DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

*District 7*

### PROJECT CONCEPT REPORT

Project Number: STP0004-00(447)  
County: *Cobb County*  
P. I. Number: 0004447

Federal Route Number: *N/A*

State Route Number: *SR 120*

INTERSECTION IMPROVEMENT BARRETT PKWY AND SR 120

*See sheet two for area location sketch*

Recommendation for approval:

DATE 6/7/05

*Neil Sam*  
Project Manager

DATE 6/8/05

*Bryant Poole* *(MAL)*  
District Engineer

The concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Improvement Program (RTP) and the State Transportation Improvement Program (STIP).

DATE \_\_\_\_\_

\_\_\_\_\_  
State Transportation Planning Administrator

DATE \_\_\_\_\_

\_\_\_\_\_  
State Transportation Financial Management Administrator

DATE \_\_\_\_\_

\_\_\_\_\_  
State Environmental/Location Engineer

DATE \_\_\_\_\_

\_\_\_\_\_  
State Traffic Safety & Design Engineer

DATE 6/14/05

*Brian K. Sumner* *RCU*  
Project Review Engineer

## SCORING RESULTS AS PER MOG 2440-2

<b>Project Number:</b> STP-0004-00(447)	<b>County:</b> Cobb	<b>PI No.:</b> 0004447
<b>Report Date:</b> June 8, 2005		
<b>Concept By:</b> DOT Office: District 7		
<input checked="" type="checkbox"/> Concept Stage		<b>Consultant:</b> N/A
<b>Project Type:</b> Choose One From Each Column	<input type="checkbox"/> Major <input checked="" type="checkbox"/> Minor	<input checked="" type="checkbox"/> Urban <input type="checkbox"/> Rural
		<input type="checkbox"/> ATMS <input type="checkbox"/> Bridge Replacement <input type="checkbox"/> Building <input type="checkbox"/> Interchange Reconstruction <input checked="" type="checkbox"/> Intersection Improvement <input type="checkbox"/> Interstate <input type="checkbox"/> New Location <input type="checkbox"/> Widening & Reconstruction <input type="checkbox"/> Miscellaneous

FOCUS AREAS	SCORE	RESULTS
Presentation	100	
Judgement	100	
Environmental	100	
Right of Way	100	
Utility	100	
Constructability	100	
Schedule	100	

## DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

*District 7*

### PROJECT CONCEPT REPORT

Project Number: STP0004-00(447)  
County: *Cobb County*  
P. L. Number: 0004447

Federal Route Number: *N/A*

State Route Number: *SR 120*

INTERSECTION IMPROVEMENT BARRETT PKWY AND SR 120

*See sheet two for area location sketch*

Recommendation for approval:

DATE 6/7/05

DATE 6/8/05

*Michael J. Smith*  
Project Manager  
*Bryant Poole* *(MPL)*  
District Engineer

The concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Improvement Program (RTP) and the State Transportation Improvement Program (STIP).

DATE \_\_\_\_\_

\_\_\_\_\_  
State Transportation Planning Administrator

DATE \_\_\_\_\_

\_\_\_\_\_  
State Transportation Financial Management Administrator

DATE \_\_\_\_\_

\_\_\_\_\_  
State Environmental/Location Engineer

DATE \_\_\_\_\_

\_\_\_\_\_  
State Traffic Safety & Design Engineer

DATE \_\_\_\_\_

\_\_\_\_\_  
Project Review Engineer



S.R. 120/ Dallas Highway at Barrett Pkwy  
STP-0004-00(447)



**Need and Purpose:** This project is located at the intersection of S.R 120/Dallas Highway and Barrett Parkway CR 321 and is 1.5 miles west of the city of Marietta in unincorporated Cobb County. The subject intersection is signalized and lies within a commercial zone. State Route 120/Dallas Highway consist of 96-foot of pavement: eight 12-foot lanes and a 10-foot concrete median, 2' 6" concrete curb and gutter and a 5-foot concrete sidewalk. Barrett Parkway consist of 84-foot pavement: seven 12-foot lanes, a 10-foot concrete median and 2' 6" concrete curb and gutter with a 5-foot sidewalk. [The intersection's area has experienced tremendous growth and development since the intersection's construction of present conditions. Vehicles traveling westbound on S.R. 120/Dallas Hwy and northbound on Barrett Pkwy experience delays when making left turns. The high volume of vehicles making left turns on the before mentioned roads "Q's" back into adjacent thru lanes.] The efficiency of the intersection is also diminished with the absence of an auxiliary to accommodate the high number of right turns from southbound approach of Barrett Parkway. [These conditions have made the intersections safety a point of concern as evidence in the increases in rear end accidents of (30) and (6) six sideswipe accidents in one year. Right turning movements for Barrett parkway between the hour of 7:00 to 8:00 am are 188 and then between 5:00 to 6:00 pm are 279 though traffic counts during these hours are 517 and 737 counts, left turn movements during these hours are 173 and 140 counts.] A left turn study was conducted the study indicates adding second left turn lanes for westbound and northbound approaches and a right turn lane southbound on Barrett Parkway would improve the operation and safety of the intersection. [By providing the warranted auxiliary lanes the intersection's safety and efficiency would improve dramatically.]

**Description of the proposed project:** To allow widening of Barrett Parkway With a 12-foot right turn lane in the southbound lane between sta. 22+68.70 and sta. 24+36.10 and adding second left turn lanes for the westbound lanes of Dallas Highway and the northbound lanes of Barrett parkway. No new driveways are proposed. Wheelchair ramps will be constructed. The proposed work site is located on Right of way on both sides of the highway beginning 563' south of the center line of Barrett Parkway and fronting 1164' north along said highway: at mile post 06.17. There will be no change in storm water run-off. This project will require striping modifications, milling of existing pavement markings and striping for additional left turn lanes.

**Is the project located in a Non-attainment area?**   X   Yes        No. The project is described in the Atlanta Regional Commission's (ARC'S) Regional Transportation Plan (RTP) as widening the existing four-lane with one left turn facility to four-lanes with a second left turn lanes and a right turn lane on Barrett Pkwy. The proposed completion for this project's FY2005. The conforming model's description above is consistent with the proposed project concept.

**PDP Classification:** Major        Minor   X    
**Federal Oversight:** Full Oversight ( ), Exempt(X), State Funded ( ), or Other ( )

**Functional Classification:** Urban Principal Arterial

**U. S. Route Number(s):** N/A **State Route Number(s):** SR 120

**Traffic (AADT):**

Current Year: (2005) 46192 Design Year: (2025) 58430

**Existing design features:**

- Typical Section: *four-12' lanes, and one-12' lt. turn lane*
- Posted speed 45 mph Minimum radius for curve: 996.45
- Maximum super-elevation rate for curve: .035
- Maximum grade: 3.3 % (List mainline, cross roads, and driveways)
- Width of right of way: 140' ft.
- Major structures: None List all bridge structures including length, width, and sufficient rating).
- Major interchanges or intersections along the project: None
- Existing length of roadway segment and the beginning mile logs for each county segment. For new location projects, the existing length of roadway is zero (0).

**Proposed Design Features:**

Proposed typical section(s): *S. R. 120/Dallas Hwy. 96' of pavement eight 12' lanes and a 10' conc. Median, 2' 6" conc. Curb and gutter and a 5' conc. Side walk. C. R. 321, 84' pavement seven-12' lanes, a 10' conc. Median and 2' 6" conc. curb and gutter with a 5' side walk.*

- Proposed Design Speed Mainline 45 mph
- Proposed Maximum grade Mainline 3.3 % Maximum grade allowable 7.5 %.
- Proposed Maximum grade Side Street 1.52 % Maximum grade allowable 7.5 %.
- Proposed Maximum grade driveway 0.76 %
- Proposed Minimum radius for curve 996.45 Maximum radius allowable 996.45
- Proposed Maximum super-elevation rate for curve: 0.035 match exist SE
- Proposed Maximum degree of curve 5^45" Maximum degree allowable 5^45"
- Right of way
  - Width 140'
  - Easements: Temporary ( ), Permanent ( ), Utility ( ), Other ( )
  - Type of access control: Full ( ), Partial ( ), By Permit (X), other ( )
  - Number of parcels: 0 Number of displacements:
    - Business: 0
    - Residences: 0
    - Mobile homes: 0
    - Other: 0
- Structures: *N/A*
  - Bridges *N/A*
  - Retaining *N/A*

Major intersections and interchanges *None*

- Traffic controls during construction *none*.
- Design Exceptions to controlling criteria anticipated:

	<u>UNDETERMINED</u>	<u>YES</u>	<u>NO</u>
HORIZONTAL ALIGNMENT:	( )	( )	(X)
ROADWAY WIDTH:	( )	( )	(X)
SHOULDER WIDTH:	( )	( )	(X)
VERTICAL GRADES:	( )	( )	(X)
CROSS SLOPES:	( )	( )	(X)
STOPPING SIGHT DISTANCE:	( )	( )	(X)
SUPERELEVATION RATES:	( )	( )	(X)
HORIZONTAL CLEARANCE:	( )	( )	(X)
SPEED DESIGN:	( )	( )	(X)
VERTICAL CLEARANCE:	( )	( )	(X)
BRIDGE WIDTH:	( )	( )	(X)
BRIDGE STRUCTURAL CAPACITY:	( )	( )	(X)

- Design Variances: *None*
- Environmental concerns: Project Concept Report page *N/A*

- Level of environmental analysis:
  - Are Time Savings Procedures appropriate? Yes ( X ), No ( ),
  - Categorical exclusion (X ),
  - Environmental Assessment/Finding of No Significant Impact (FONSI) (N/A ), or
  - Environmental Impact Statement (EIS) n/a
- Utility involvements: *None*

**Project responsibilities: Cobb County**

- X Design,
- X Right of Way Acquisition,
- X Relocation of Utilities,
- X Letting to contract,
- X Supervision of construction,
- X Providing material pits,
- X Providing detours.

**Coordination**

- Initial Concept Meeting date and brief summary: *None*.
- Concept meeting date and brief summary. *None*.
- P. A. R. meetings, dates and results.
- FEMA, USCG, and/or TVA
- Public involvement Local government comments. *None*
- Other projects in the area.

Other alternates considered:



Project Concept Report page6  
Project Number: STP-0004-00(447)  
P.I. Number: 0004447  
County: Cobb County

No Build: *No action would be taken to improve existing intersection.*

Comments *None*

Attachments:

1. Cost Estimates:
  - a. Construction including E&C,
  - b. Right of Way, and
  - c. Utilities.
2. Sketch location map.
3. Typical sections.
4. Accident summaries.

### PRELIMINARY COST ESTIMATE

Project No. STP-0004-00(447),  
PI No. 0004447

County: Cobb County

**Project Name:** Barrett Parkway at Dallas Highway (SR120) Intersection Improvement

DATE: June 3, 2005

ESTIMATE LETTING DATE: July 2005

PREPARED BY: Jimmy Brown

PROJECT LENGTH (MILES): 0.2 Mile

(X) PROGRAMMING PROCESS      ( ) CONCEPT DEVELOPMENT      ( ) DURING PROJECT DEV.

PROJECT COST	
<b>A. RIGHT-OF-WAY</b>	
1. PROPERTY (LAND & EASEMENT)	\$0.00
2. DISPLACEMENTS; RES 0; BUS 0; M.H. 0	\$0.00
3. OTHER COST (ADM/COST, INFLATION)	\$0.00
<b>SUBTOTAL: A</b>	<b>\$0.00</b>
<b>B. REIMBURSABLE UTILITIES: (LGPA)</b>	
1. RAILROAD	\$0.00
2. TRANSMISSION LINES	\$0.00
3. SERVICES	\$0.00
<b>SUBTOTAL: B</b>	<b>\$0.00</b>
<b>CONSTRUCTION</b>	
<b>C. MAJOR STRUCTURES</b>	
1. RETAINING WALLS	\$0.00
2. BRIDGES (600' X 90' bridge)	\$0.00
3. DETOUR BRIDGES	\$0.00
4. EXTEND/REPLACE EXISTING CULVERTS	\$0.00
<b>SUBTOTAL: C</b>	<b>\$0.00</b>

Programming Process Page 2  
 Project Number: STP-0004-00(447)  
 P.I. Number: 0004447  
 County: Cobb County

STATE OF GEORGIA  
 Department of Transportation

<b>D. GRADING AND DRAINAGE</b>	
1. EARTHWORK	
a. BORROW: (1,000 cu. yd. @ \$7.00)	\$0.00
b. EXCAVATION: (200 cu. yd. @ \$7.00)	\$0.00
SUBTOTAL: D-1	\$0.00
2. DRAINAGE	
a. SIDE DRAIN PIPE (3200 ft OF 24 In @ \$40)	\$0.00
b. FES (4 ea @ \$506)	\$0.00
c. CATCH BASIN (12 ea @ \$1800)	\$0.00
d. 24" TYPE I RIP RAP (50 sy @ \$40)	\$0.00
SUBTOTAL: D-2	\$0.00
SUBTOTAL: D	\$0.00
<b>E. BASE AND PAVING</b>	
1. AGGREGATE BASE (330 sq. yds. @ \$10.19)	\$3,362.70
2. ASPHALT PAVING	
a. Surface - Recy. 12.5 mm Asph. Concrete (1,532 sq. yds. @ \$8.50)	\$13,022.00
b. Binder - Recy. 19 mm Ashp. Concrete (225 sq. yds. @ \$11.50)	\$2,587.50
c. Base - Recy. 25 mm Asph. Concrete (225 sq. yds. @ \$12.50)	\$2,812.50
d. Tack Coat (70 gals. @ \$1.52)	\$ 106.40
e. Mill Asph. Conc. Pavement (1,185 sq. yds. @ \$1.86)	\$2,204.10
f. Pavement Reinf. Fabric (265 lf @ \$7.51)	\$1,990.15
SUBTOTAL: E-2	\$26,085.35



Programming Process Page 3  
 Project Number: STP-0004-00(447)  
 P.I. Number: 0004447  
 County: Cobb County

STATE OF GEORGIA  
 Department of Transportation

<b>3. CONCRETE PAVING</b>	
a. CLASS 'B' CONCRETE (11 cu yds @ \$484.31)	\$5,327.41
b. CLASS 'B' CONC FOR SIDEWALK & RETAINING WALL (12 cu yds @ \$422.35)	\$5,068.20
c. CONCRETE SIDEWALK (130 sq. yds. @ \$25.00)	\$3,250.00
d. CONCRETE MEDIAN (14 sq. yds. @ \$41.38)	\$ 579.32
e. WHEELCHAIR RAMPS (4 ea @ \$818.70)	\$3,274.80
f. CONCRETE CURB/GUTTER (225 LF @ \$21.14)	\$4,756.50
SUBTOTAL: E-3	\$22,256.23
SUBTOTAL: E	\$48,341.58
<b>F. LUMP ITEMS</b>	
1. TRAFFIC CONTROL	\$26,618.00
2. GRADING COMPLETE	\$13,650.00
3. GRASSING	\$ 650.15
4. EROSION CONTROL	\$ 276.52
5. ADJUST TRAFFIC SIGNAL	\$23,303.00
6. MISCELLANEOUS LANDSCAPING	\$ 2,000.00
SUBTOTAL: F	\$66,497.67
<b>G. MISCELLANEOUS</b>	
1. SIGNING	
a. SIGNS	\$ 567.50
b. POSTS	\$ 465.12
SUBTOTAL: G-1	\$ 1,032.62

Programming Process Page 4  
 Project Number: STP-0004-00(447)  
 P.I. Number: 0004447  
 County: Cobb County

STATE OF GEORGIA  
 Department of Transportation

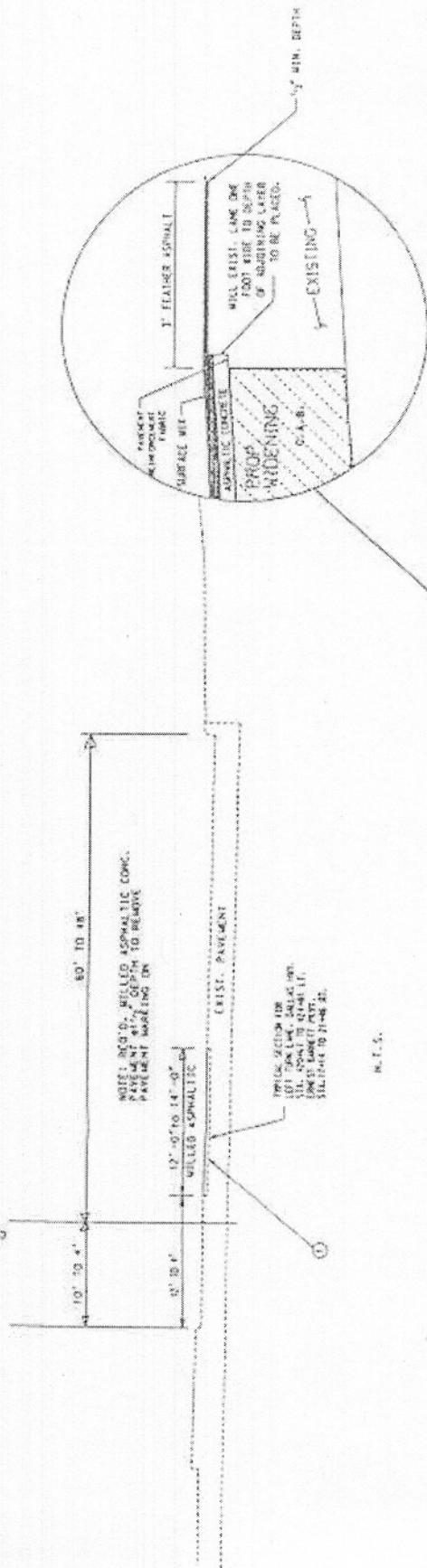
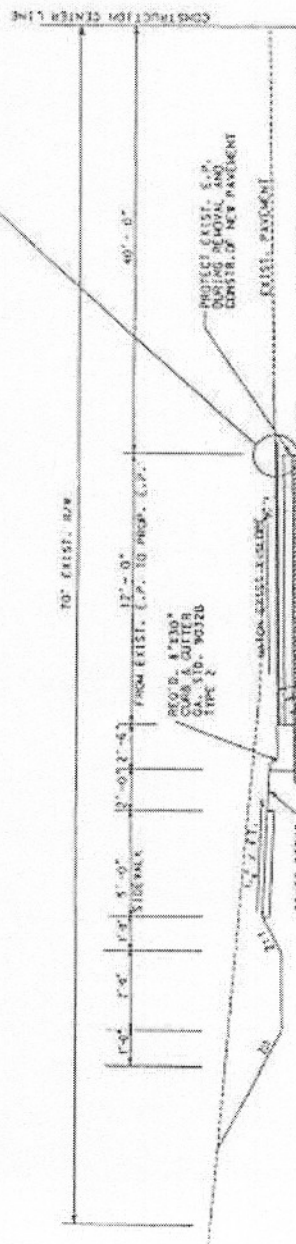
2. STRIPING	
1. 5 IN WHITE SOLID (1,550 ft @ \$0.45)	\$ 697.50
2. 5 IN WHITE SKIP (970 GLF @ \$0.40)	\$ 388.00
3. 24 IN WHITE SOLID (235 lf @ \$2.93)	\$ 688.55
4. PAVEMENT MARKING, ARROW, TP 2 (15 ea @ \$30.46)	\$ 456.90
5. RAISED PAVEMENT MARKINGS	\$ 189.47
6. REMOVE EXISTING THERMOPLASTIC STRIPING	\$ 556.50
SUBTOTAL: G-2	\$ 2,976.92
3. HANDRAIL, SPECIAL DESIGN (40 lf @ \$67.35)	\$ 2,694.00
SUBTOTAL: G-3	\$ 2,694.00
SUBTOTAL: G	\$ 6,703.54

Programming Process Page 5  
 Project Number: STP-0004-00(447)  
 P.L Number: 0004447  
 County: Cobb County

STATE OF GEORGIA  
 Department of Transportation

ESTIMATE SUMMARY	
A. RIGHT-OF-WAY	\$0.00
B. REIMBURSABLE UTILITIES	\$0.00 (LGPA)
CONSTRUCTION	
C. MAJOR STRUCTURES	\$0.00
D. GRADING AND DRAINAGE	\$0.00
E. BASE AND PAVING	\$48,341.58
F. LUMP ITEMS	\$66,497.67
G. MISCELLANEOUS	\$ 6,703.54
SUBTOTAL CONSTRUCTION COST	\$121,542.79
INFLATION (5% PER YEAR)(Construction 2005)	\$0.00
E. & C. (10%)	\$ 12,154.28
TOTAL CONSTRUCTION COST	\$133,697.07
GRAND TOTAL PROJECT COST	\$133,697.07

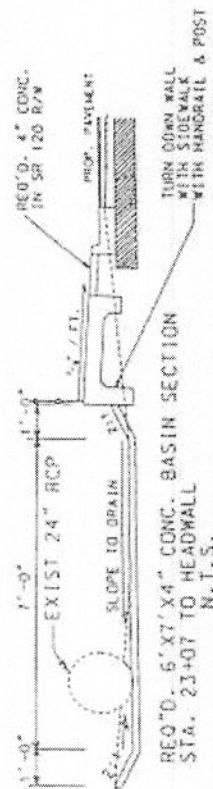


[illegible]

TYPICAL SECTION FOR  
RIGHT TURN LANE, ERNEST BARRETT PKWY.  
STA. 22+54 TO 24+50

① RECYCLED 1" ASPHALTIC CONC. 12.5MM SUPERPAVE, GP 2  
② INCLUSTION MATERIAL AND H LIME  
③ RECYCLED 2" ASPHALTIC CONC. 13MM SUPERPAVE, GP 1 OR 2  
④ INCLUSTION MATERIAL AND H LIME  
⑤ RECYCLED 4" ASPHALTIC CONC. 25MM SUPERPAVE, GP 1 OR 2  
⑥ INCLUSTION MATERIAL AND H LIME  
⑦ 8" GRADE AGGREGATE BASE COURSE

N. T. S.

[illegible]

Sample	Size, $N$	Size, $N$	Size, $N$
ME 5 (106.2)	17	100	100
CMC (133.2)	17	100	100

COBB COUNTY DEPARTMENT OF  
TRANSPORTATION

CLASSIFIED AT: 2000 000 0000 P.L.

DALLAS HWY. SR. 120 @ ERNEST BARR  
STA. 22+61 TO 27+50  
TYPICAL SECTION

## DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

*District 7*

### PROJECT CONCEPT REPORT

Project Number: STP0004-00(447)  
County: *Cobb County*  
P. I. Number: 0004447

Federal Route Number: *N/A*

State Route Number: *SR 120*

INTERSECTION IMPROVEMENT BARRETT PKWY AND SR 120

*See sheet two for area location sketch*

Recommendation for approval:

DATE 6/7/05

*W. J. Allen*  
Project Manager

DATE 6/8/05

*Bryant Poole* (MAL)  
District Engineer

The concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Improvement Program (RTP) and the State Transportation Improvement Program (STIP).

DATE \_\_\_\_\_

\_\_\_\_\_  
State Transportation Planning Administrator

DATE \_\_\_\_\_

\_\_\_\_\_  
State Transportation Financial Management Administrator

DATE \_\_\_\_\_

\_\_\_\_\_  
State Environmental/Location Engineer

DATE 6-17-05

*Keith Golden* (KB)  
State Traffic Safety & Design Engineer

DATE \_\_\_\_\_

\_\_\_\_\_  
Project Review Engineer